



## Measuring the Efficiency of the European TEN-T Corridors Using Network DEA Approach

### Problem description

For the last two decades, EU transport policy has promoted Intermodal Freight Transport (by rail, or inland waterways). After considerable investments (approximately €28 billion for funding rail projects between 2007 and 2013), and giving priority to shifting freight from road to intermodal freight transport (IFT), the EU intermodal transport policy has not achieved considerable improvements. To improve the performance of IFT networks and to define effective policies to promote IFT market share, we need to have an overall picture of the efficiency of IFT chains and understand the main activities that cause the inefficiency in an IFT network. A well-known approach for efficiency analysis is Data Envelopment Analysis (DEA). DEA measures the performance of each DMU relative to all other DMUs in the sample considering the fact that each DMU lies on or below the best-practice production frontier. The aim of this project is analyzing the efficiency of the European TEN-T corridors using/extending a modified Network DEA model as presented by Saeedi (2018). Applying this model, we can find the less efficient IFT chains and corridors, and at the same time, we can find the respective less efficient divisions (e.g. terminals, rail or barge operators) and give recommendations for improving the efficiency of the European IFT corridors.

### Assignment

- Review of literature on efficiency measurement models applied in freight transport domain.
- Collect data about TEN-T corridors.
- Apply/extend the modified Network DEA model.
- Write a report and possibly a scientific paper.

### Information

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